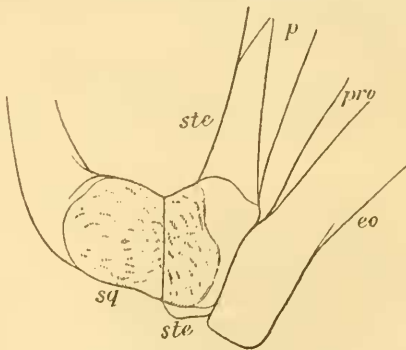


XLIX.—*Remarks on the Value of certain Cranial Characters employed by Prof. Cope for distinguishing Lizards from Snakes.* By G. A. BOULENGER, F.R.S.

IN a note in the September number of the 'American Naturalist' for 1895 (p. 855) Prof. Cope has attempted to recharacterize the suborders Lacertilia and Ophidia on some cranial features which, I submit, are inadequate for that purpose.

The bone I have hitherto termed Supratemporal (Squamosal of many authors, Paroccipital of Cope), to which the quadrate is attached in most snakes, is stated by Prof. Cope in the Lacertilia to merely touch the latter bone, which articulates solely with the exoccipital; and he gives figures, taken from *Varanus griseus*, illustrating this point. Prof. Cope has evidently contented himself with the examination of only a few types of Lacertilian skulls. It is otherwise inconceivable how such a general statement could have been made. In many Lacertilia the quadrate articulates with the squamosal and the supratemporal to the total exclusion of the exoccipital; whilst in some in which the squamosal is absent the articulation is with the exoccipital and the supratemporal (*Uroplates*), or with the exoccipital, supratemporal, and parietal (*Gecko*). I here give a figure of the bones in an



Suspensorium of *Chlamydosaurus Kingii*, from below and forwards.—*eo*, exoccipital; *p*, parietal; *pro*, prootic (petrosal, Cope); *sq*, squamosal (supratemporal, Cope); *ste*, supratemporal (paroccipital, Cope).

Agamoid lizard, *Chlamydosaurus Kingii*, on the model of the American author's pl. xxxi., with the articulating surface for the quadrate dotted.

Furthermore, it is difficult to understand how "Quadrated bone articulating with paroccipital" can be given as a diagnostic character of the Ophidia, when we remember that the supratemporal [paroccipital, Cope] is absent in three families of that suborder (Typhlopidae, Stenostomatidae, Uropeltidae), where the quadrated articulates with the prootic or with the prootic and the exoccipital.

In stating that "Johannes Müller first placed the distinction on a sound basis by showing that in the Ophidia the frontal and parietal bones descend to the basicranial axis as in no other vertebrates," Prof. Cope appears to ignore that such an arrangement is not universal in Snakes, since in some (e. g. *Psammophis*) the frontals do not descend, and are widely separated from the sphenoid in front of the parietals, which do not actually close the brain-case in front. That some Lacertilia agree with the Ophidia in the downward extent of the parietals the author himself admits; and as the teeth of a slow-worm are as much devoid of "dentinal roots" as those of a snake, it may be asked, What remains of Prof. Cope's new definition of the suborders of the Squamata?

L. — *Descriptions of Four small Mammals from South America, including one belonging to the peculiar Marsupial Genus "Hyracodon," Tomes.* By OLDFIELD THOMAS.

CÆNOLESTES\*, nom. nov.

*Hyracodon*, Tomes, P. Z. S. 1863, p. 50; *nec* Leidy, Proc. Ac. Philad. viii. p. 91 (1856).

*Type*: *C. fuliginosus*, Tomes, *l. c.*

*Cænolestes obscurus*, sp. n.

Very much as described in *C. fuliginosus*, but double the size.

Rather smaller than *Mus rattus*. Fur soft, thick and close. General colour uniform brown (approximately bistre-brown of Ridgway) all over, rather darker along the median line of the back; but otherwise there are no variations or markings

\* *καινός*, modern; *ληστής*, a pirate or other predatory person. The affix "-lestes" is connected in mammalogy with small and ancient fossil marsupials, e. g. *Microlestes*, *Amphilestes*, &c., so that the above name may be considered to represent an existing animal with ancient fossil relatives. The question whether this should be "-lestes" or "-leistes" has been carefully considered and submitted to classical authorities, by whom I am informed that as the iota subscript in *ληστής* would not have been pronounced at all, the proper transliteration is as above.